



Cost Estimate

The estimated cost for this remedial action, based on the final design, was calculated to be approximately \$7.1 million, within an accuracy of plus 15 to minus 5 percent. The estimated cost in M-CACES Gold format is attached (Appendix D).

This cost estimate was prepared based on vendor and supplier quotes obtained during the third quarter of 2005. Given the length of time that this design may remain inactive prior to implementation (1 to 2 years), revisiting this estimate prior to the initiation of construction is warranted.

The cost estimates shown, along with any resulting conclusions on project financial or economic feasibility or funding requirements, have been prepared for guidance in project evaluation and implementation from the information available at the time the cost estimate was prepared. The final costs of the project and resulting feasibility will depend on actual labor and material costs, competitive market conditions, actual site conditions, final project scope, implementation schedule, and other variable factors. As a result, the final project costs will vary from the cost estimates presented herein. Because of these factors, project feasibility and funding needs must be carefully reviewed before making specific financial decisions or establishing project budgets to help ensure project evaluation and adequate funding.

Biddability, Constructibility, and Operability Review

CH2M HILL's affiliate, CH2M HILL Constructors, Inc. (CCI), has reviewed this BOD report and the accompanying plans and specifications with an emphasis on biddability and constructibility. Comments from the review have been incorporated into this document and into the accompanying plans and specifications.

In addition, the project review team has reviewed this BOD report and the accompanying plans and specifications. Their comments have been incorporated as appropriate.

Tables

TABLE 1
Summary of Estimated SWACs Under Different Potential Removal Actions
CSSS Wildcat and Kokomo Creeks (OU3)

Surface Weighted Average Concentration (SWAC) in µg/kg								
Stream Segment	Area Of Influence (ft ²)	Parameter	Remedial Goal (µg/kg)	Existing Condition	Replace C > 10 x RG with PQL	Replace C > 5 x RG with PQL	Replace C > RG with PQL	Replace Aroclor > 3 x RG and PAH > 5 x RG with PQL*
1	163,272	Aroclor-1248	1,000	9,888	1,623	1,279	256	862
		Benzo(a)anthracene	1,853	430	430	297	240	277
		Benzo(a)pyrene	1,585	434	434	427	434	425
		Benzo(b&k)fluoranthene	1,361	344	326	259	242	249
		Indeno(1,2,3-cd)pyrene	930	259	259	229	218	229
2	167,587	Aroclor-1248	1,000	16,350	1,630	1,339	117	310
		Benzo(a)anthracene	1,853	1,322	407	407	264	384
		Benzo(a)pyrene	1,585	1,031	299	299	304	258
		Benzo(b&k)fluoranthene	1,361	2,198	319	319	293	306
		Indeno(1,2,3-cd)pyrene	930	766	276	276	260	260
3	267,209	Aroclor-1248	1,000	4,215	2,125	1,111	155	348
		Benzo(a)anthracene	1,853	453	361	340	259	292
		Benzo(a)pyrene	1,585	394	302	245	275	213
		Benzo(b&k)fluoranthene	1,361	700	484	415	308	321
		Indeno(1,2,3-cd)pyrene	930	297	262	252	229	240
4 (Kokomo Creek)	159,820	Aroclor-1248	1,000	26,984	683	425	154	356
		Benzo(a)anthracene	1,853	1,892	1,090	596	328	596
		Benzo(a)pyrene	1,585	828	687	495	352	495
		Benzo(b&k)fluoranthene	1,361	2,441	1,506	631	387	631
		Indeno(1,2,3-cd)pyrene	930	570	496	354	266	354
5	240,612	Aroclor-1248	1,000	6,255	369	369	154	256
		Benzo(a)anthracene	1,853	684	639	598	347	599
		Benzo(a)pyrene	1,585	569	545	545	279	545
		Benzo(b&k)fluoranthene	1,361	1,008	941	963	389	941
		Indeno(1,2,3-cd)pyrene	930	540	522	522	272	522
6	290,233	Aroclor-1248	1,000	290	290	285	124	188
		Benzo(a)anthracene	1,853	967	967	614	294	545
		Benzo(a)pyrene	1,585	1,030	1,030	685	307	616
		Benzo(b&k)fluoranthene	1,361	1,793	1,793	990	360	818
		Indeno(1,2,3-cd)pyrene	930	899	899	482	311	470
8 (Shambaugh Run)	10,703	Aroclor-1248	1,000	35	35	35	35	35
		Benzo(a)anthracene	1,853	461	461	461	461	461
		Benzo(a)pyrene	1,585	484	484	484	484	484
		Benzo(b&k)fluoranthene	1,361	1,235	1,235	1,235	1,235	1,235
		Indeno(1,2,3-cd)pyrene	930	173	173	173	173	173
Total Creek	1,299,438	Aroclor-1248	1,000	8,749	1,069	746	153	353
		Benzo(a)anthracene	1,853	897	653	485	292	461
		Benzo(a)pyrene	1,585	710	575	461	315	434
		Benzo(b&k)fluoranthene	1,361	1,368	956	642	342	581
		Indeno(1,2,3-cd)pyrene	930	565	482	366	173	358
Volume of Sediment (yd ³)					2,943	6,415	21,462	9,489

* Includes removal of four additional polygons in Section 2 (SD-068, SD-040, SD-072 and SD073) with PCB concentrations > RG.
Numbers in **bold** exceed the Final Remedial Goal.
RG = Remedial Goal per Table 4-6 in Final FS (CDM 1997)
PQL = practical quantitation limit
C = concentration of constituent

Figures
